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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,493	01/08/2001	Hirotooshi Takemori	70551/55523	4293

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EXAMINER

ORTIZ, JORGE L

ART UNIT

PAPER NUMBER

2697

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/756,493

Applicant(s)

TAKEMORI ET AL.

Examiner

Jorge L Ortiz-Criado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kay et al. U.S. Patent No. 5,44,143.

Regarding claim 1, Kay et al. discloses an integrated unit, comprising (See col. 4, lines 35-37; Fig. 1, ref # 30):

- a laser beam source for emitting a laser beam (See col. 4, lines 45-47; Fig. 1, ref. # 40);
- a detecting portion for detecting a reflected light (See col. 6, lines 13-14; Fig. 1, ref. # 68);
- a diffraction element for diffracting the laser beam (See col. 4, lines 47-50; Fig. 1, ref. # 42)
- and a casing accommodating said laser beam source and said detecting portion (See col. 4, lines 35-37; Fig. 1, ref. # 30,32),

wherein said integrated unit and a transparent optical compensation film are integrated in said integrated unit in which said diffraction element and said casing are integrated (See col. 4, lines 33-47 to col. 3, lines 1-4; Fig. # 1, ref. # 30,32,34,42).

Regarding claim 3, Kay et al. discloses wherein said optical compensation film is attached onto said diffraction element (See Fig. 1, ref # 30,34,42).

Regarding claim 4, Kay et al. discloses including said optical compensation film inside of said diffraction element (See col. 5, lines 15-19).

Regarding claim 5, Kay et al. discloses wherein said casing and said optical compensation film are integrated (See Fig. 1, ref # 30,32,34).

Regarding claim 6, Kay et al. discloses including a cap member, provided to said casing, for closing an opening (See Fig. 1, ref. # 65).

Regarding claim 7, Kay et al. discloses wherein said cap member and an optical compensation film are integrated (See Fig. 1, ref. # 34,65).

Regarding claim 8, Kay et al. discloses wherein said diffraction element has a diffraction pattern for diffracting a laser beam, said diffraction pattern being formed on said optical compensation film (See col. 5, lines 3-22).

Regarding claim 9, Kay et al. discloses wherein said diffraction element has a diffraction pattern for diffracting a laser beam, said optical compensation film being formed on said diffraction pattern (See col. 5, lines 3-22).

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Regarding claim 10, Kay et al. discloses an optical pickup for reading information recorded on an optical disk by condensing a laser beam onto the optical disk (See col. 1, lines 24-30; col. 4, lines 33-47), comprising:

- a laser beam source for emitting a laser beam (See col. 4, lines 45-47; Fig. 1, ref. # 40);
- a detecting portion for detecting a reflected light (See col. 6, lines 13-14; Fig. 1, ref. # 68);
- a diffraction element for diffracting the laser beam (See col. 4, lines 47-50; Fig. 1, ref. # 42);
- a casing accommodating said laser beam source and said detecting portion (See col. 4, lines 35-37; Fig. 1, ref. # 30,32),
- an integrated unit in which said diffraction element and said casing are integrated (See col. 4, lines 33-47 to col. 3, lines 1-4; Fig. # 1, ref. # 30,32,42)
- and an objective lens for condensing the laser beam onto the optical disk (See Fig. 1, ref. # 52),
- wherein said integrated unit and a transparent optical compensation film are integrated (See col. 4, lines 33-47 to col. 3, lines 1-4; Fig. # 1, ref. # 30,32,34).

Regarding claim 11, Kay et al. discloses an optical pickup for reading information recorded on an optical disk by condensing a laser beam onto the optical disk (See col. 4, lines 33-35; Fig. 1), comprising:

- a laser beam source for emitting a laser beam (See col. 4, lines 45-47; Fig. 1, ref. # 40);
- a detecting portion for detecting a reflected light (See col. 6, lines 13-14; Fig. 1, ref. # 68);
- a diffraction element for diffracting the laser beam (See col. 4, lines 47-50; Fig. 1, ref. # 42);
- a casing accommodating said laser beam source and said detecting portion (See col. 4, lines 35-37; Fig. 1, ref. # 30,32);

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an integrated unit in which said diffraction element and said casing are integrated (See col. 4, lines 33-51; Fig. 1, ref # 30,32,42) ;

an objective lens for condensing the laser beam onto the optical disk (See Fig. 1, ref. # 52);

and a reflection mirror for changing a direction of the laser beam, wherein said reflection mirror

and a transparent optical compensation film are integrated (See col. 6, lines 18-24; Fig. 1, ref. # 34,64).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kay et al. U.S. Patent No. 5,544,143 in view of Bernstam U.S. Patent No. 6,322,868.

Kay et al. discloses all the limitations based on claim 1 as outlined above. Kay et al. discloses a compensation film. Kay et al. discloses the desirability used for compensate a diffracting beam (See col. 5, lines 23-35), which is a transparent material, including glass,

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plastic or film. Also Kay et al. discloses the desirability of change the polarization state of the laser beam (See col. 4, lines 64-67 to col. 5, lines 1-2)

But Kay et al. does not expressly disclose that the compensation film is a high polymer film serving a function of changing polarization state of the laser beam.

However, this feature is well know in the art as evidenced by Claussen, which discloses a compensation film is a high polymer film serving a function of changing polarization state of the laser beam (See col. 7, lines 50-53).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Kay et al.'s invention by using a high polymer film in order of changing polarization state of the laser beam as suggested by Bernstam.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to an integrated unit and an optical pick-up.

- a. U.S. Pat. No. 5,677,902 to Brazas, Jr., which discloses an optical system.
- b. U.S. Pat. No. 5,856,961 to Brazas et al., which discloses an optical read/write head.
- c. U.S. Pat. No. 5,696,749 to Brazas, Jr. et al., which discloses an integrated unit.
- d. U.S. Pat. No. 6,014,359 to Nagano, which discloses an optical head.
- e. U.S. Pat. No. 5,602,383 to Takekoshi et al., which discloses an integrated optical head.
- f. U.S. Pat. No. 6,272,097 to Nakao et al., which discloses an integrated unit.

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- g. U.S. Pat. No. 5,726,962 to Okada et al., which discloses a compact optical pick-up head.
- h. U.S. Pat. No. 6,084,844 to Takeda, which discloses an optical head assembly.
- i. U.S. Patent Application Publication No. 2003/0021197 to Nishi, which discloses an optical pickup.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu. (8:30 am - 6:00 pm), Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HOFSASS R JEFFERY can be reached on (703) 305-4717. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-6743 for regular communications and (703) 308-6743 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

joc
February 27, 2003


Richemond Dorvil
Primary Examiner